

Amendments to the Claims

The following is a complete listing of all claims in the application, with an indication of the status of each; this listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of claims:

1. (Currently amended) A vaccine for equine influenza virus, comprising:
an effective immunizing amount of an isolated DNA, the isolated DNA ~~consisting~~
~~essentially of an HA1 encoding sequence of~~ comprising sequences that encode an HA1 protein
~~from which HA2 is absent, the sequences being~~ from a strain of equine-2 influenza virus; and
a pharmacologically acceptable carrier or diluent.
2. (Currently amended) The vaccine according to claim 1, wherein the ~~HA1 encoding sequence~~
~~strain of equine-2 influenza virus~~ is selected from the group consisting of ~~strains~~
A/Eq/Kentucky/98, A/Eq/Miami/63, A/Eq/Kentucky/81, A/Eq/Fontainebleau/79,
A/Eq/Kentucky/94, A/Eq/Newmarket/2/93, A/Eq/New York/99, and A/Eq/Oklahoma/2000.
3. (Currently amended) The vaccine according to claim 1, wherein the ~~HA1 encoding sequence~~
~~is for strain~~ is A/Eq/Kentucky/98.

4. (Currently amended) The vaccine according to claim 1, wherein the ~~HA1 encoding sequence~~ sequences that encode an HA1 protein from which HA2 is absent ~~comprises~~ comprise the nucleotide sequence of SEQ ID NO: 1.
5. (Original) The vaccine according to claim 1, further comprising one or more of the group consisting of additional antigenic components, encoding sequences for additional antigenic components, and other vaccines.
6. (Currently amended) The vaccine according to claim 1, further comprising a vector containing the ~~HA1 encoding sequence~~ sequences that encode an HA1 protein from which HA2 is absent.
7. (Original) The vaccine according to claim 6, wherein the vector is a eukaryotic expression vector.
8. (Original) The vaccine according to claim 7, wherein the vector is selected from the group consisting of pcDNA3.1/V5-His-TOPO and pVAX1.
9. (Original) The vaccine according to claim 1, further comprising an adjuvant.

10. (Original) The vaccine according to claim 9, wherein the adjuvant is selected from the group consisting of complete Freund's adjuvant, incomplete Freund's adjuvant, saponin, mineral gels, surface active substances, pluronic polyols, polyanions, peptides, oil or hydrocarbon emulsions, keyhole limpet hemocyanins, and dinitrophenol.

11. (Canceled).

12. (Currently amended) The vaccine according to claim 1, further comprising a liposome into which the HA1 encoding sequence sequences that encode an HA1 protein from which HA2 is absent is encapsulated.

13. (Original) A method of inducing an immune response against equine influenza virus, comprising administering to an equid an effective immunizing amount of the vaccine of claim 1.

14. (Currently amended) The method according to claim 13, further comprising the steps of inserting the HA1 encoding sequence sequences that encode an HA1 protein from which HA2 is absent into a vector and delivering the vaccine intranasally into the respiratory tract.

15. (Original) The method according to claim 14, wherein the vector is a eukaryotic vector.

16. (Original) The method according to claim 15, wherein the vector is selected from the group consisting of pcDNA3.1/V5-His-TOPO and pVAX1.

17. (Previously presented) The method according to claim 15, wherein the vector is a liposome.

18. (Original) The method according to claim 13, wherein the vaccine is administered at a dosage of at least 0.01 .mu.g DNA per gram of body weight.

19. (Original) The method according to claim 13, wherein the vaccine is administered at a dosage falling within the range of 0.001 μ g DNA per kilogram of body weight to 0.01 μ g DNA per gram of body weight.